

## CLAIMS

1. An ostomy system for receiving bodily waste, comprising:
  - a gas impermeable outer bag;
  - a water impermeable inner bag enclosed within the outer bag;
  - 5 a coupling system for attaching the bag to the body of a patient and for securing the inner bag in relation to the patient's body and for securing the outer bag in relation to the inner bag, the coupling system defining an orifice to enable bodily waste to be received by the inner bag;
  - characterised in that
  - 10 the coupling system comprises a barrier for preventing liquids and solid particles from passing from the inner bag to the outer bag, at least part of the barrier being permeable to flatus gasses;
  - the outer bag is essentially made from a material which is impermeable to flatus gasses;
  - 15 the outer bag comprises an outlet with a flatus filter for releasing flatus gasses from the outer bag.
2. An ostomy system according to claim 1, wherein the inner bag is impermeable to flatus gasses.
3. An ostomy system according to claim 1 or 2, wherein the barrier comprises a gas  
20 permeable foam.
4. An ostomy system according to any of the preceding claims, wherein the barrier comprises a gas permeable membrane.
5. An ostomy system according to any of the preceding claims, wherein the barrier comprises means for forcing the flow of flatus gasses in the barrier along a predetermined flow path.
- 25 6. An ostomy system according to any of the preceding claims, wherein the inner bag is of a structure which essentially maintains its physical integrity upon immersion in water.
7. An ostomy system according to any of the preceding claims, wherein the coupling system comprises a body flange to be attached to the patient's body, the body flange defining a central opening, and wherein the barrier is provided in the form of a ring-shaped member  
30 attached to an outer surface of the body flange, said outer surface of the body flange facing away from the patient's body during use of the ostomy system, the ring-shaped barrier

thereby defining a central opening which coextends with the central opening of the body flange.

8. An ostomy system according to claim 7, wherein the coupling system further comprises an outer flange attached to an outer surface of the barrier, said outer surface of the barrier  
5 facing away from the patient's body during use of the ostomy system, the outer flange defining a central opening which coextends with the central opening of the body flange and of the barrier;

the inner bag being sealed to an outer surface of the outer flange, so that flatus gasses may only escape from the inner bag through the barrier;

10 the outer bag being arranged such that flatus gasses escaping the inner bag through the barrier enter the outer bag.

9. An ostomy system according to claim 8, wherein the outer flange overlaps the barrier, whereby respective radially inwardly facing rim portions of the body flange, the barrier and the outer flange define a boundary of said orifice, so that the flatus gasses enter the barrier  
15 through the radially inwardly facing rim portion thereof.

10. An ostomy system according to claim 7, wherein the barrier comprises a foam, at least an outer surface of which is provided with a gas-impermeable surface layer;

the inner bag being sealed to the outer surface of the surface layer, so that a first portion of the outer surface of the coated barrier faces the interior of the inner bag, and so  
20 that a second portion of the outer surface of the coated barrier faces the exterior of the inner bag;

the surface layer comprising at least one perforation allowing flatus gasses to enter the barrier at the first portion thereof and to exit the barrier at the second portion thereof, whereby flatus gasses may escape from the inner bag;

25 the outer bag being arranged such that flatus gasses escaping the inner bag through the barrier enter the outer bag.

11. An ostomy system according to claim 10, wherein said at least one perforation is provided as a non-coated outer surface portion of the barrier which extends partially into said first portion of the outer surface of the barrier and partially into said second portion.

30 12. An ostomy system according to claim 10, wherein said at least one perforation is provided as a plurality of distinct perforations, at least one of which is provided at said first portion of the outer surface of the barrier, and at least another one of which is provided at said second portion.

13. An ostomy system according to claim 12, wherein the perforation at said first portion of the outer surface of the barrier is angularly displaced with respect to the perforation at said second portion, the barrier comprising a partial obstruction to flatus gasses, the obstruction being arranged between the perforation in the first portion and the perforation in the second portion, so that flatus gasses are conveyable in one and only one angular direction between said perforations.
14. An ostomy system for receiving bodily waste, comprising:
- an outer bag;
  - a water impermeable inner bag enclosed within the outer bag;
  - a coupling system for mounting the bag to the body of a patient and for securing the inner bag in relation to the patient's body and for securing the outer bag in relation to the inner bag, the coupling system defining an orifice to enable bodily waste to be received by the inner bag;
- characterised in that the inner bag is of a structure which essentially maintains its physical integrity upon immersion in water.
15. An ostomy system according to claim 14, wherein the structure of the inner bag is such that it essentially maintains its limpness upon immersion in water.
16. An ostomy system according to claim 14 or 15, wherein the structure of the inner bag is such that the inner bag does not lose its buoyancy immediately upon immersion in water.
17. An ostomy system according to any of claims 14-16, wherein the inner bag essentially maintains its physical integrity and/or limpness and/or buoyancy upon immersion for at least 10 minutes at a temperature of the water of 30 °C.
18. An ostomy system according to any of claims 14-17, wherein the material of the inner bag is biodegradable.
19. An ostomy system according to any of claims 14-18, wherein the material of the inner bag comprises 35 – 55% by weight of starch, such as maize or potato starch.
20. An ostomy system according to any of claims 14-19, wherein the material of the inner bag comprises 35 – 55% by weight of synthetic polyester, such as polycaprolactone.
21. An ostomy system according to claim 19 and 20, wherein the material of the inner bag comprises said starch and said synthetic polyester in substantially equal ratios.

22. An ostomy system according to any of claims 14-21, wherein material of the inner bag comprises not more than 10% by weight of a softener, such as glycerol.

23. An ostomy system according to any of claims 14-22, wherein the coupling system  
5 to the outer bag, at least part of the barrier being permeable to flatus gasses.